

JIA



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,973	12/03/2003	Guijin Jiao	24170759.3	5127

23562 7590 02/11/2005

BAKER & MCKENZIE  
PATENT DEPARTMENT  
2001 ROSS AVENUE  
SUITE 2300  
DALLAS, TX 75201

EXAMINER

PRONE, JASON D

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,973

Applicant(s)

JIAO, GUIJIN

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/29/04 & 4/5/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 5 line 20, item "20". On page 7 line 17, item "32". On page 9 line 19, item "40". On page 11 line 20, item "52". On page 14 line 4, item "64". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 is dependant from independent claim 1 which clearly discloses that carriages are used to couple the first and second arms to base and first arm.

### ***Claim Rejections - 35 USC § 112***

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In regards to claim 1 lines 11-12, the phrase "extended arm...further configured to rotate about a second rotational axis" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis not the entire extended arm. It is uncertain what structure allows for the entire extended arm to rotate about a second rotational axis.

6. In regards to claims 2 and 11 lines 10-11 of both claims, the phrase a fifth movement device associated with the extending arm and configured to rotate the extending arm about the second rotational axis. It is clear from the specification that the central shaft (46) rotates about a second rotational axis and is rotated by the fifth movement device not the entire extended arm. It is uncertain what structure allows the fifth movement device to rotate the entire extending arm and not just the central shaft.

7. In regards to claims 4 and 13 lines 10-11 of both claims, the phrase "a fifth measurement device associated with the extending arm for determining the rotation of the extending arm about the second rotational axis" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis and is measured by the fifth measurement device not the entire extended arm. It is uncertain

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what structure allows the fifth measurement device to measure the rotation of the entire extending arm and not just the central shaft.

8. In regards to claim 10 lines 8-10, the phrase "an extending arm...configured...for rotational movement about a second rotational axis" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis not the entire extended arm. It is uncertain what structure allows for the entire extended arm to rotate about a second rotational axis.

9. In regards to claim 19 lines 8-9, the phrase "rotating the extending arm about a second rotational axis" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis not the entire extended arm. It is uncertain what structure allows the apparatus to perform the method of rotating the entire extended arm about a second rotational axis.

10. In regards to claim 20, the phrase "rotating the extending arm using a fifth movement device associated with the extending arm" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis and is rotated by the fifth movement device not the entire extended arm. It is uncertain what structure allows the fifth movement device to perform the method of rotating the entire extending arm and not just the central shaft.

11. In regards to claim 22 lines 7-8, the phrase "measuring the rotation of the extending arm about the second rotational axis with respect to the second arm" is unclear. It is clear from the specification that the central shaft (46) rotates about a second rotational axis and is measured by the fifth measurement device not the entire

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extended arm. It is uncertain what structure allows the fifth measurement device to perform the function of measuring the rotation of the entire extending arm and not just the central shaft.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-27 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Korwin et al. (4,662,117) in view of Boumerzoug et al. (6,764,385). Korwin et al. discloses the invention including a base having a length extending along a first horizontal axis (26), a first arm (22) coupled to a first carriage (24) and extending along a second horizontal axis perpendicular to the first horizontal axis (22), that the first carriage is coupled to the base and configured to move across the base along the first horizontal axis (24), a second arm (28) coupled to a second carriage (Fig. 1) and extending along a vertical axis (28), that the second carriage is coupled to the first arm and configured to move across the first arm along the second horizontal axis (Fig. 1), an extending arm coupled to the second arm and parallel therewith (32), that the extending arm is configured to move across the second arm along the vertical axis (Fig. 1), a first movement device associated with the base and configured to move the first arm along the first horizontal axis (Fig. 1), a second movement device associated with the first arm and configured to move the second arm along the second horizontal axis (30), a fourth

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movement device associated with the second arm and configured to move the extending arm along the vertical axis (Fig. 1), that the one of the movement devices comprise handles associated therewith capable of implementing the movement device (Fig. 1 no structure defining the handle has been claimed therefore anything is capable of being a handle), a first measuring device associated with the base for determining the location of the first arm along the base, a second measurement device associated with the first arm for determining the location of the second arm along the first arm , and a fourth measurement device associated with the second arm for determining the location of the extending arm along the second arm (Column 2 lines 66-68 cont. Column 3 lines 1-2), one locking device associated with each of the arms for locking the corresponding locations (30), a tool holder coupled to an end of the extending arm (36) and configured to hold a tool (34), that the tool holder is capable of holding a nozzle (36), and that the arms and the tool holder are capable of orienting the nozzle (Fig. 1) but fails to disclose that the second arm is pivotally coupled to the second carriage, a third movement device associated with the second arm and configured to pivot the second arm about the first rotational axis, and a third measurement device associated with the second arm for determining the pivot of the second arm about the first rotational axis. Boumerzoug et al. teaches a second arm (36) is pivotally coupled to the second carriage (37), a third movement device associated with the second arm and configured to pivot the second arm about the first rotational axis (Fig. 3), and a third measurement device associated with the second arm for determining the pivot of the second arm about the first rotational axis (34). Therefore, it would have been obvious to one of ordinary skill in the art, at the

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time of the invention, to have provided Korwin et al. with the second arm pivotally coupled to the second carriage including the associated movement and measurement devices, as taught by Boumerzoug et al., to allow for the apparatus to position the tool at an oblique angle relative to the work piece.

In view of the art rejection under Korwin et al. in view of Boumerzoug et al., the method is inherent.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pulver et al., Lapeyre deceased et al., Coleman, Sugino et al., Klingel, Hashish et al., Butler et al., and Gambini.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 571-272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should



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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature, possibly reading "JP", in black ink.

JP  
February 07, 2005

A handwritten signature in black ink, appearing to be "Allan N. Shoap".

Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700